

Work Order ID 146394

Wednesday, May 18, 2016 8:51:24 AM

146394

Page 1

Item ID: **D4018** Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rib
 Start Date: 5/20/2016 Start Qty: 9.00 ***9*** Cust Item ID:
 Required Date: 5/24/2016 Req'd Qty: 9.00 ***9*** Customer:
 Reference:

Approvals: Process Plan: MLS Date: MAY 18 2016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4018	D								

100 0.00

100

Large Fab

Large Fab

Memo

1- Cut tube as per dwg D4018
2- debur and remove identification markings

0.54

9 *CP* *16-06-02*
CC *16-6-2*

110 QC6- Inspect dimensions to drawing 0.00

110

QC

Quality Control

Memo

0.00

(9)

DAS
38
9-89

JUN 03 2016

120 Identify as per dwg & Stock Location: WA004 0.00

120

Packaging

Packaging

Memo

LOCATION: WA004

0.09

DAS
43
9-89

9x

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
				OTHER : ☐							

Work Order ID 146394***146394***

Page 2

Wednesday, May 18, 2016 8:51:24 AM

Item ID: D4018-5

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Rib

Start Date: 5/20/2016 Start Qty: 9.00

9

Cust Item ID:

Required Date: 5/24/2016 Req'd Qty: 9.00

9

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.90

Quality Control

MLJ JUN 03 2016

MLJ JUN 03 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Wednesday, May 18, 2016 8:51:23 AM

Page 1

Work Order ID: 146394

146394

Parent Item: D4018-5

D4018-5

Parent Item Name: Rib

Start Date: 5/20/2016

Required Date: 5/24/2016

Start Qty: 9.00

Required Qty: 9.00

Comments: IPP RevA: new issue DD 09.11.26 verified by:EC IPP Rev:B as
per dwg revA 10.03.15 verified by:EC IPP Rev:C as per dwg
RevB DD 10.04.16 verified by:EC IPP Rev:D as per dwg revC DD
10.08.18 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M304TS0.500W.049

Purchased

No

100

f

1,249.314

0.5558

5.265473

M304TS0 500W 049

Square Tubing

M134486

6 C/P 16-06-02

Location

Loc Qty

Loc Code

WA004

1249.31421

M134104

40.31421

M134486

650

M134618

559

6

DQA: _____ Date: _____



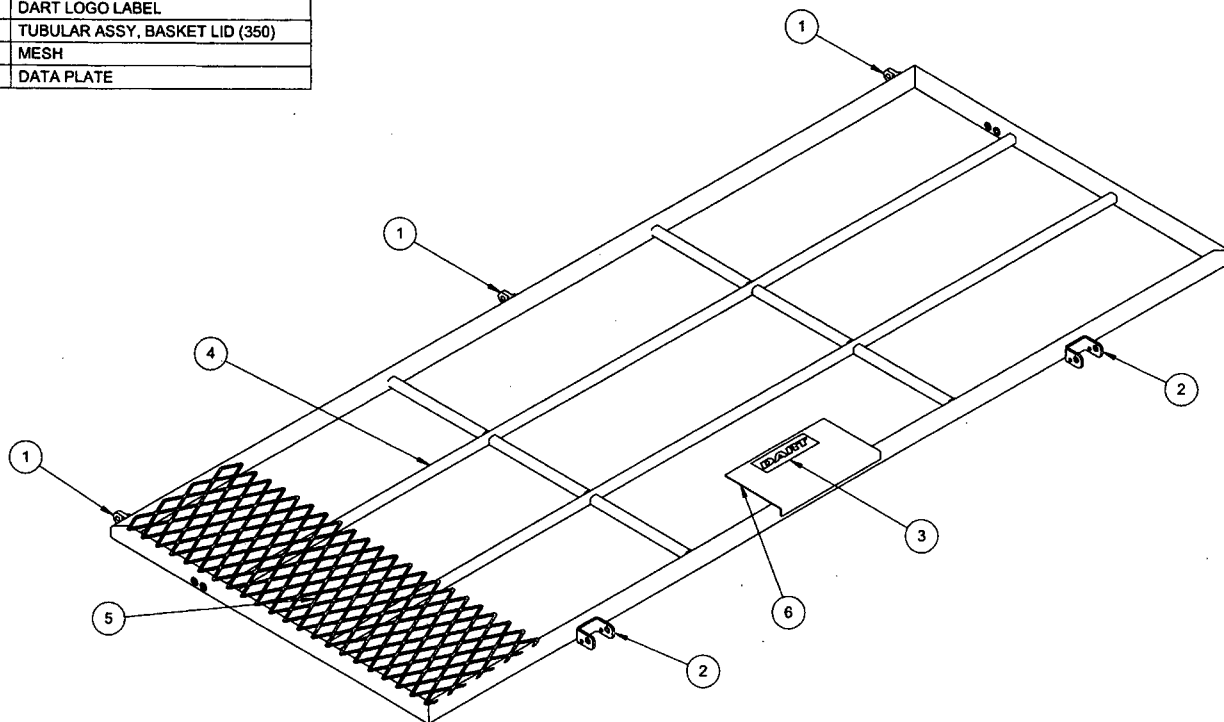
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

ITEM	QTY	P/N	DESCRIPTION
	X	D4018-041	SHORT BASKET LID ASSY (350)
1	3	D4016-3	HINGE HALF, LID
2	2	D2581	MOUNTING BRACKET
3	1	D2728-3	DART LOGO LABEL
4	1	D4018-101	TUBULAR ASSY, BASKET LID (350)
5	1	D4020-7	MESH
6	1	D4021-3	DATA PLATE

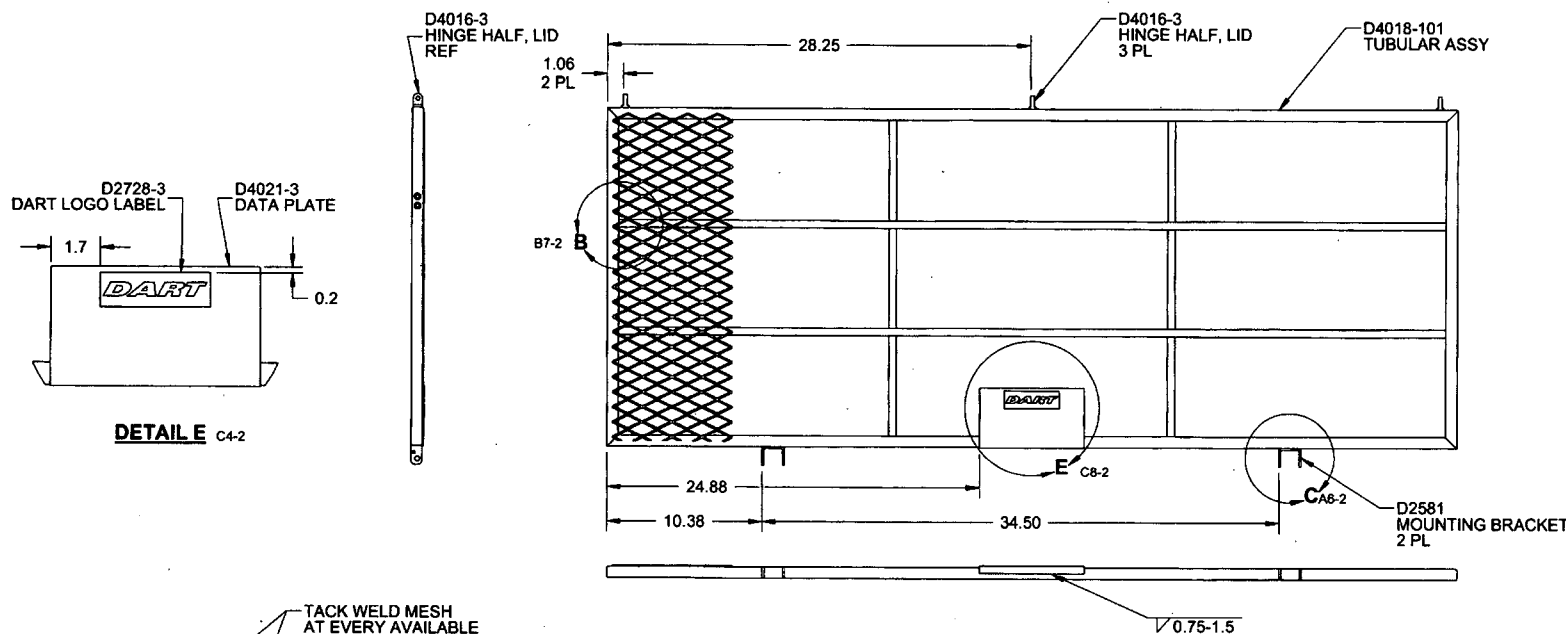


D4018-041 SHORT BASKET LID ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

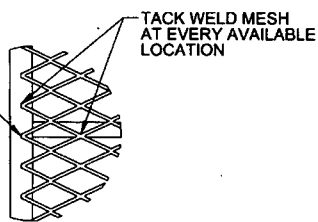
NOT A COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO REVISION
WILL BE USED
DATE 10/03/04
146394 MJS
16-05-18

RELEASED
2013-08-16

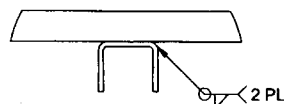
D	C7-3 D4035-043 WAS D4035-041 (REASON: PROPARM OPTION DELETED).	AJS	13.07.18
C	REMOVED D4086-232, UPDATED DETAIL E ACCORDINGLY (C8-2). REASON: NOW INSTALLED BY OPERATORS PER D350-607-2 REV. C AND D350-607-3 REV. A.	MB	10.08.05
B	BOM: INSERTED QTY 1 D2728-3 AS ITEM 3 & QTY 1 D4086-232 PLACARD AS ITEM 7. ITEMS RENUMBERED AS REQD. SHEET 2, NOTES: PAINT SPEC ADDED & NOTE 7 & 8 REVISED. (B4-2) FRONT VIEW ADDED, WELDING SYMBOLS REVISED. DETAIL VIEW E ADDED (C4-2)&(C82). SIDE VIEWS ADDED (C1-4)&(D1-4).	JPH	10.03.25
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	JP	DRAWING NO.	REV. D
MFG. APPR.	JP	D4018	SHEET 1 OF 4
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	SHORT BASKET LID ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



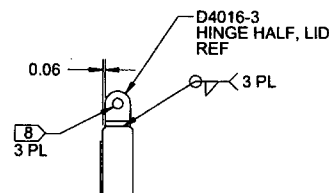
DETAIL E C4-2



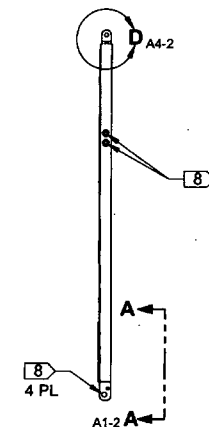
DETAIL B C6-2



DETAIL C C3-2



DETAIL D D1-2



VIEW A-A C1-2

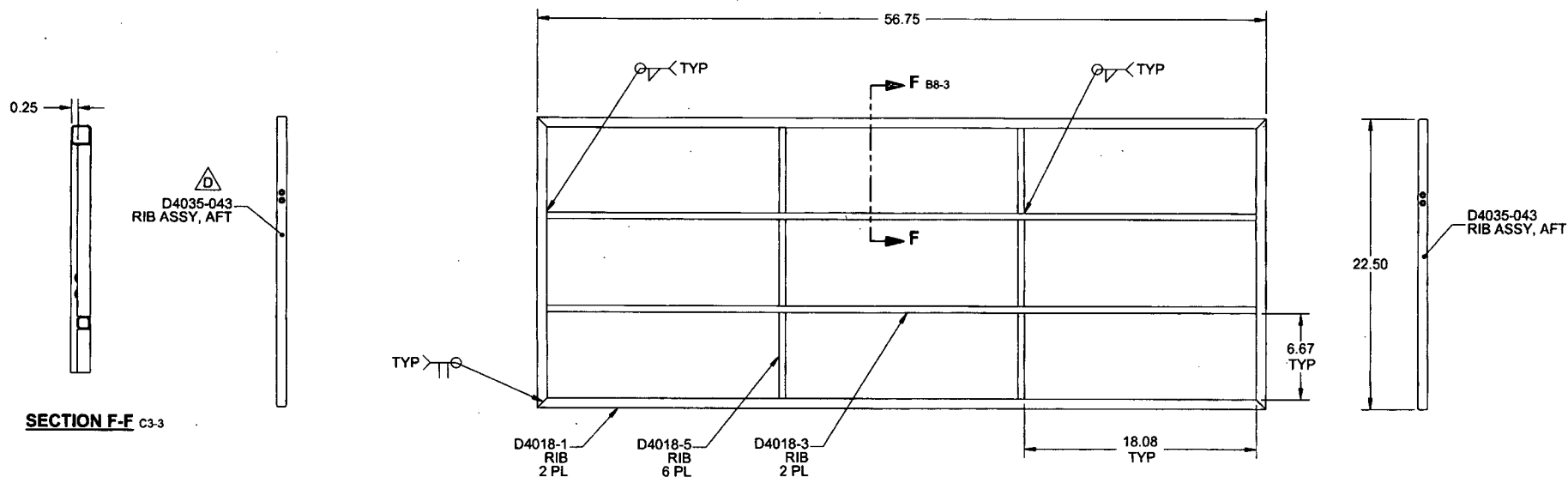
RELEASED
2013-08-16

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT TO OUTSIDE SURFACE OF MESH PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 14.5 lbs APPROX
- 8) MASK HOLES PRIOR TO FINISHING
- 9) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4018	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET LID ASSY (350)	NTS
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ITEM	QTY -101	P/N	DESCRIPTION
	X	D4018-101	TUBULAR ASSY, BASKET LID (350)
1	2	D4018-1	RIB
2	2	D4018-3	RIB
3	6	D4018-5	RIB
4	2	D4035-043	BASKET LID RIB ASSY, AFT



8 D4018-101 TUBULAR ASSY, BASKET LID (350)

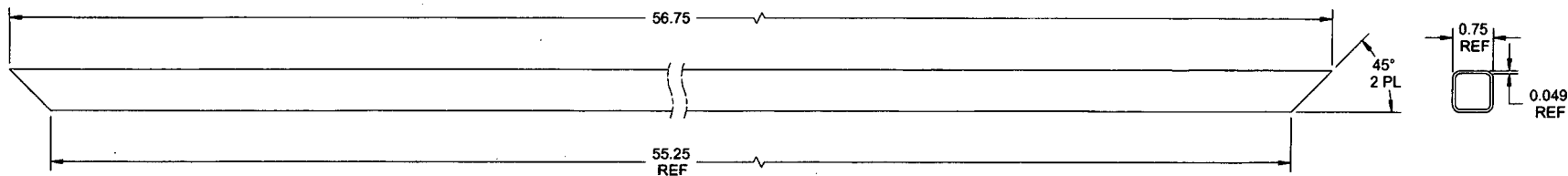
RELEASED
2013-08-16

NOTES:

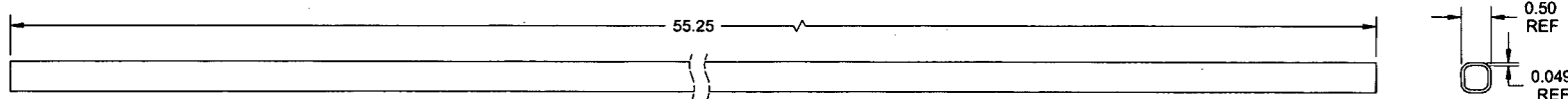
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 9.06 lbs
- 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D4018-101
- 9) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4018	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET LID ASSY (350)	NTS
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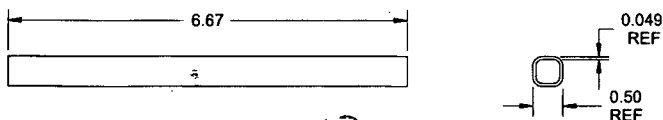
8 7 6 5 4 3 2 1



D4018-1 RIB



D4018-3 RIB



D4018-5 RIB

RELEASED
2013-08-16
H

NOTES:

1) MATERIAL -1: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS0.750W.049

-3 & -5: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>[Signature]</i>	D4018	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SHORT BASKET LID ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1